

# Environmentario

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Government  
Publications

## ENVIRONMENTAL SPILLS ON THE DECLINE — 1991 REPORT REVEALS

DECEMBER 8, 1992

**T**here has been a decrease in the number of environmental spills, according to a summary report of the 1991 spills released by the Ministry of the Environment. This is the first time a decrease has been reported since the ministry's Spills Action Centre (SAC) began operations in 1985.

A total of 5,251 spills were reported to SAC in 1991, about an 8 per cent decrease from 1990. Early indications point to an additional six per cent decrease in 1992.

### Facts and Figures

According to the report, 54 per cent of reported spills involved oils or fuels. Chemicals or chemical solutions made up 18 per cent, wastes or waste water 17 per cent, and gaseous emissions 9 per cent. A large number of these spills occurred in small quantities.

Of total spills, about 14 per cent had a negative impact on the environment. Of these, two-thirds involved soil contamination and the remainder comprised surface water contamination. Fifteen spills raised human health and safety concerns.

Forty-seven per cent of all spills were cleaned up, and 17 per cent partially cleaned up. Most of the remaining spills were to air or water, where clean up was not possible.

About 30 per cent of the spills were either entirely or partially discharged to water. Of these, 288 involved oil or chemical spills to the

ties from a variety of sectors, including chemical, metallurgical, pulp and paper and petroleum accounted for an additional 25 per cent. Combined public sector spills made up one-fifth of the total.



### Identifying environmental problems

SAC's spills summary reports assist the ministry and others, including Environment Canada and the International Joint Commission on the Great Lakes, in identifying and

responding to environmental problems.

MOE's pollution abatement programs and spills reduction initiatives are developed or modified as trends and concerns are identified using this type of information. The ministry has implemented a province-wide Spills Prevention Strategy (SPS) requiring repeat

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## NEW MINISTER BRINGS ACROSS- THE-BOARD EXPERIENCE

FEBRUARY 3, 1993

**C**.J. (Bud) Wildman has been appointed Minister of the Environment and Energy. He previously served as Minister of Natural Resources and retains responsibility for Native Affairs.

Mr. Wildman has been MPP for Algoma since 1975. He has acted on the caucus chair of the New Democratic Party, and sits on several cabinet committees.

He is also a member of the Ontario Round Table on the Environment and the Economy, and is Co-Chair of the Ontario

Round Table on the Constitution.

Mr. Wildman graduated from Carleton University in Ottawa in 1967 with a B.A. in history and political science. He and his wife, Anne, live with their four children in Echo Bay, east of Sault Ste. Marie.

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# Environmentario

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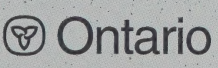
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Great Lakes system. The remainder were to the Detroit River, St. Mary's River, Georgian Bay and the Niagara River.

### Motor vehicles chief culprits

Motor vehicles were the largest source of spills, accounting for more than one-quarter of reported spills. Manufacturing and processing facili-

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# 3RS CODE OF PRACTICE FOR ONTARIO HOME BUILDERS

JANUARY 13, 1993

Industry officials were joined by the Environment Minister to launch the new 3Rs Code of Practice developed by the Ontario construction industry. This Code of Practice will promote 3Rs practices to Reduce, Reuse and Recycle construction materials across the province.

Representatives of the construction associations in Ontario worked with the Waste Reduction Office of the Ministry of the Environment to establish a set of principles that follows the 3Rs.

Implementation of the Code of Practice will reduce the amount of waste being sent to landfills by the construction industry. The Code will be used by the 3,800 member firms of the Ontario Home Builders' Association. "What is unique about these 3Rs Code is that it has been industry driven," said Stephen Kaiser, Vice-President of the Association.

## Ontario Construction Industry 3RS Code Of Practice

The Ontario construction industry has adopted this Code of Practice relating to the 3Rs of waste management: REDUCE, REUSE and RECYCLE. This code will give the construction industry a point of reference from which to coordinate its activities. The Code demonstrates the commitment to working toward sustainable development, recognizing the need to balance environmental and economic considerations. The Code outlines the commitment of the Ontario construction industry to responsible management of its waste stream and material resources. The Code is not intended to be a comprehensive document establishing a construction industry standard for the 3Rs of waste management.

The Ontario construction industry will promote strategies to reduce the amount of waste being sent to landfill. This commitment goes beyond simple compliance with the



letter and spirit of the law: it involves a commitment to leadership by taking the initiative to employ advanced material management techniques.

Construction industry members are encouraged to consider implementing the following principles

and initiatives to the extent practical, recognizing members' individual business and operating constraints:

## REDUCE

- promote the Ontario construction industry's commitment to reduce the waste stream;
- incorporate 3Rs waste management considerations into the pre-planning of projects;
- investigate construction techniques, technologies and design which produce less waste;
- target factors which contribute to excessive waste generation;
- consider purchasing options that minimize packaging and product waste;
- purchase construction materials in dimensions and quantities to satisfy project requirements; and
- avoid damage of construction materials by proper on-site handling and storage.

## REUSE

- consider methods of reusing materials on-site where appropriate;
- separate materials on-site for reuse purposes where appropriate;
- strip reusable materials out of buildings during demolition and renovation if practical; and
- network locally to identify markets for reusable materials.

## RECYCLE

- investigate methods of recycling material resources;
- separate materials on-site for recycling purposes where practical;
- use recycled-content and recyclable construction materials;
- cooperate with private and government initiatives to divert recyclables from disposal;
- be knowledgeable of local recycling facilities and technologies; and
- network locally to identify markets for recyclable materials.

## THE 3RS CODE OF PRACTICE HAS BEEN ENDORSED BY:

Canadian Standards Association  
Council of Ontario Construction Associations  
Electrical Contractors Association of Ontario  
Grand Valley Construction Association  
Greater Toronto Home Builders' Association

Association  
Heavy Construction Association of Toronto  
Independent Contractors Group  
London & District Construction Association  
Mechanical Contractors Association of Ontario  
Metro Toronto Demolition Contractors Association  
Niagara Construction Association  
Ontario General Contractors Association  
Ontario Hot Mix Producers Association  
Ontario Home Builders' Association  
Ontario Industrial Roofing Contractors Association  
Ontario Painting Contractors Association  
Ontario Sewer & Watermain Contractors Association  
Ottawa Construction Association  
Provincial Building & Construction Trades of Ontario  
Sarnia Construction Association  
Sudbury Construction Association  
Toronto Construction Association  
Utility Contractors Association of Ontario with the assistance of the Ministry of the Environment Waste Reduction Office.

## \$894,000 GRANT FOR CFC COLLECTION AND RECYCLING

NOVEMBER 6, 1992

MOE is providing \$894,066 in financial support for new technology to capture, purify and recycle CFCs. The good news was announced at the Ministry's annual Technology Transfer Conference.

The grant under the Ministry's Environmental Technologies Program will support the Halozone Blue Bottle project over the next three years to help capture ozone-destroying chlorofluorocarbons. The Montreal Protocol, established in 1987 by the United Nations, sets a 1995 deadline for ending CFC emissions to the environment and a 1997 deadline to end their production.

The U.N. deadlines mean that by 1995 all CFCs will have to be recaptured as equipment is decommissioned or retrofitted with non-CFC technology. By 1997, there will still

be millions of air conditioning appliances, refrigeration and cooling units in homes, offices and other buildings which will require pure CFCs to remain operational.

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offenders to submit spills prevention and response plans to the ministry, and to incorporate better management practices. About 30 companies are currently involved in the SPS. To date, 12 have completed their work plans.

Copies of the report, *Spills Action Centre Summary Report of 1991 Spills*, PIBS #2186, are available by contacting the Ministry of the Environment's Public Information Centre in Toronto at (416) 323-4321 or 1-800-565-4932.

# COMPREHENSIVE CLEAN WATER REGULATION FOR ONTARIO'S PULP AND PAPER INDUSTRY

FEBRUARY 2, 1992

**E**nvironment Ontario released a comprehensive clean water regulation targeting a wide range of substances from Ontario's 26 pulp and paper mills, including organochlorines. New stringent limits will greatly reduce those chemicals that pose a threat to human health and the environment. Ontario's goal is for a zero discharge of organochlorines by 2002.

"We must safeguard health. More than 30 million people, 6 million in Ontario, depend on the Great Lakes for their drinking water. The Great Lakes can no longer sustain this kind of toxic overload."

Environment Minister Ruth Grier said.

Pulp and paper mills are responsible for more than 90 per cent of the organochlorines — a family of chlorine-based chemicals that includes known cancer-causing agents — discharged into the Great Lakes and Ontario's waterways.

"To protect the Great Lakes' ecosystem, our economic and community well-being, we must act now. This pulp and paper regulation is both progressive and practical. By eliminating organochlorines in stages, we have addressed industry's requests for practical timeframes and long-term certainty so it can plan for its future investments," Mrs. Grier said.

In its 1992 report on the Great Lakes, the International Joint Commission stated that organochlorines are "dangerous to the environment, deleterious to the human condition, and can no longer be tolerated in the ecosystem, whether or not unassailable scientific proof of acute or chronic damage is universally accepted."

"Pollution prevention is the foundation for this new clean water regulation," added Mrs. Grier. "It furthers the Ontario government's commitment to the Great Lakes Water Quality Agreement's principle of zero discharge of persistent toxic substances. This includes the binational Lake Superior program which is designed to protect the integrity of our largest great lake.

The clean water regulation will help meet the goal of the Remedial Action Plans in the eight toxic hot spots around the lakes affected by pulp and paper mill pollution."

"In addition to significant reductions, the pulp and paper industry is required to plan for the elimination of chlorine. It will lead Ontario into the 21st century with cleaner water by eliminating some toxic substances and reducing others by close to 100 per cent within three years," Mrs. Grier added.

Natural Resources Minister Bud Wildman said, "We recognize the challenge this new regulation poses for our forest industry. We will be discussing with them how to develop new technologies to meet those challenges. We must work together to ensure the environmental and economic sustainability of our industry, our resources and our communities."

All four categories of pulp and paper mills (kraft, sulphite/mechanical, corrugating, de-inking/board/fine papers/tissue) must meet the limits proposed in the regulation for all substances. Compared to 1990, a number of substances will be reduced dramatically by 1995, including:

- chloroform, 96 per cent reduction
- phenol, 88 per cent reduction
- Biochemical Oxygen Demand (BOD), 84 per cent reduction
- toluene, 83 per cent reduction

"The government understands that this is a period of transition for the industry as it restructures for sustainability and moves towards a greener future. We will continue to

work with companies. Indeed, we will enhance our support as they research new technologies and new processes," Mrs. Grier said.

The regulation includes limits that must be met by 1995 for the following substances: Biochemical Oxygen Demand (BOD), total suspended solids, total phosphorus, chloroform, toluene, phenol, 2,3,7,8-TCDD (dioxins) and 2,3,7,8-TCDF (furans). Discharges from pulp and paper mills will also have to meet a stringent toxicity test: the wastewater must be safe enough for fish to survive.

In addition, the limit of organochlorine discharge for the eight kraft mills, measured by AOX\*, is set at 1.5 kilograms/tonne of pulp by Dec. 31, 1995 and at 0.8 kilogram/tonne of pulp by Dec. 31, 1999. In order to achieve the goal of zero discharge of AOX by 2002, the kraft mills must also submit AOX Elimination Plans to the government under the following schedule:

- initial AOX Elimination Plans to be produced 6 months after regulation is passed
- interim plans by Dec. 31, 1995 and
- final AOX Elimination Plans by Dec. 31, 1998.

All kraft mills in Ontario are currently operating at levels below the 2.5 kilograms/tonne limit of AOX as required by existing control orders.

The draft limit regulations, which were developed through a consultative process that began in 1986 under the MISA program (Municipal/Industrial Strategy for

Abatement), are available for a 60-day public comment and review period.

Copies of the Draft Effluent Limits Regulations for the Pulp and Paper Sector (PIBS #2261) and supporting technical materials including backgrounders and reports (see attached list) can be obtained by calling the Ministry of the Environment's Public Information Centre at (416) 323-4321.

\* AOX: Adsorbable Organic Halides, an analytical method for measuring all organochlorines collectively rather than individually.

Organochlorines are a family of carbon-based compounds bound by chlorine atoms.



## Supporting Documents:

- Draft Development Document For the Pulp and Paper Sector Effluent Limit Regulation, (PIBS 2263), 250 pages.

Report describes the steps involved in the development of limits for the Pulp and Paper Sector and contains the draft regulation and the background technical information used to develop the draft regulation

- Protocol for Conducting A Storm Water Control Study, (PIBS 2262), 10 pages.

The protocol describes the role and responsibilities of the discharger in preventing contaminants from escaping through stormwater runoff and the requirements that must be followed in conducting a stormwater control study

- Protocol for Sampling and Analysis of Industrial/Municipal Wastewater, (PIBS 1699), 150 pages.

Outlines procedures to be followed by industry when sampling and analyzing effluent under MISA regulations.

## Background Material

- Clean Waters for Ontario: Municipal/Industrial Strategy for Abatement Overview, (PIBS 2100), 4 pages.
- Clean Water Regulation: Pulp and Paper Sector, (PIBS 2264), 8 pages.

# HELPING PEOPLE HELP THE ENVIRONMENT — MOE ASSISTANCE PROGRAMS IN ACTION

**M**OE's Waste Reduction Office and Waste Management Branch offer a variety of financial and technical assistance programs to develop 3Rs methods and improve waste management in municipalities, industry, private businesses and educational institutions across Ontario, including: Blue Box Municipal Recycling Support Program; Municipal Reduction/Reuse Program including home composting projects; Municipal Waste Material Recovery Program; Industrial Waste Diversion Program; Student Action for Recycling (STAR); Household Hazardous Waste Collection Program; and Ontario Tire Recycling Program.

## Cash for Waste Management Initiatives in Waterloo Region and Guelph

DECEMBER 11, 1992

**T**he Waterloo County Board of Education has received a cheque for \$322,200 to launch its Student Action for Recycling (STAR) program. The money comes as part of the ministry's \$358,000 contribution to the program, which covers two thirds of total capital costs, as well as 50 per cent of the coordinator's salary. Under Waterloo County's STAR program, local municipal collectors will pick up recyclables from 130 elementary and secondary schools. The ministry's goal is to establish STAR in 5,000 public and private schools across Ontario. More than 50 school boards are participating in STAR and over 3,300 schools have received approval to start recycling programs.

The region also received MOE cheques for more than \$1.1 million toward the 1991/92 operation of its Material Recycling Centre and the Cambridge Blue Box program. As well, a \$799,400 grant was awarded to the Regional Municipality of Waterloo for home composting units.

On the same day, Environment Minister Ruth Grier, Energy Minister Brian Charlton and Natural Resources Minister Bud

Wildman met to launch the Guelph 2000 project.

Guelph 2000, a Green Community initiative funded by these three ministries, combines measures to encourage energy and water efficiency and waste reduction. At least 12 different organizations and community groups will be involved in planning and carrying out this project.

Planned innovations include home visits, a neighbourhood action committee and an electronic bulletin board. Trained "green advisors" will visit homes on request to recommend retrofits and improvements aimed at reducing waste and improving energy and water efficiency.

Other projects in the Guelph area to receive grant approval include: the City of Guelph — \$105,540 for composters and \$597,750 for the Blue Box program; Tallon Metal — \$100,000 under the Environmental Technologies Program; Guelph Utility Pole — \$83,150 under the Industrial Waste Diversion Program.

## \$18 Million for Mississauga Property Links Waterfront Greenway

NOVEMBER 24, 1992

**A** celebration was held by municipal leaders to mark the purchase of a 15.7 hectare property in Mississauga for the Metropolitan Toronto and Region Conservation Authority. The property will be an important link in the waterfront greenway along the shore of Lake Ontario. "Ownership of this land guarantees that it will be maintained as public greenspace for use by all

residents of the Greater Toronto Area," Metro Chairman Alan Tonks said.

Funding for the \$18 million acquisition was provided by the Ontario Government (\$9 million), the Municipality of Metropolitan Toronto (\$4.5 million) and the Regional Municipality of Peel (\$4.5 million). Welcoming the news of the purchase, Regional Municipality of Peel Chair Emil Kolb said, "This property is sure to be enjoyed, not only by the residents of Peel, but the entire greater Toronto region". The property previously belonged to Canada Post.

The idea of having this important waterfront property in public ownership was supported by both the Royal Commission on the Future of the Toronto Waterfront and the newly-formed Waterfront Regeneration Trust, which assisted the conservation authority in finalizing the negotiations. "With this purchase, we will be able to link Marie Curtis Park with the Lakefront Promenade Park to the west," Conservation Authority Chair Bill Ganger observed.

Mississauga Mayor Hazel McCallion commented: "We are establishing greenspace which will play an important role in the life of the community", she said.

Ontario's contribution to the purchase comes in the form of a parcel of provincial land which has been transferred to the City of Mississauga, which in turn forwarded a \$9 million cheque to the conservation authority on behalf of the province.

The greenway will be part of the Waterfront Trail, which will run from Burlington Bay to the Trent River. The trail was announced in April 1991.

## Grants to Reduce Landfill Waste From the Greater Toronto Area

NOVEMBER 18, 1992

**\$**1,509,191 has been awarded to 11 municipalities and organizations in the Greater Toronto Area for innovative 3Rs projects as part of Ontario's Waste Reduction Action Plan.

The Regional Municipality of Durham will use \$22,500 of a total of \$192,941 to promote the reuse of old clothing and other household items in conjunction with Goodwill Industries. Three trailers will be set up to enable residents to donate used goods. The Goodwill Reuse Project will bring the recycled goods to the public through Goodwill outlets in Toronto and across the province.

The Town of Aurora will receive \$189,200 to further develop its municipal recycling program.

The Municipality of Metropolitan Toronto has been granted \$66,020 to continue its successful Home Composting Education Project.

The Regional Municipality of Peel will use \$32,750 of its \$679,271 grant to investigate the composition and marketability of plastics collected through its Blue Box program.

## Ontario Communities Receive Over \$1 Million In Grants

DECEMBER 14, 1992

Ten communities across the province have been awarded \$1,052,914 as part of Ontario's Waste Reduction Action Plan. The funds are provided under several 3Rs programs which have brought the plan within reach of local communities throughout Ontario.

\$698,800 has been awarded to the Kingston Area Recycling Corporation for its highly successful Blue Box program. The grant is from the Municipal Recycling Support Program. Three other municipalities — Prince Edward County, Township of Cambridge and the Township of Bastard and South Burgess — have received a total of \$201,476 from this program.

\$12,000 under the STAR program — Student Action for Recycling — was approved for the Ottawa Roman Catholic Separate School Board. The City of Guelph and two Northern Ontario communities received grants totalling \$118,950 to promote backyard composting.

Two other communities — the City of North Bay and the Town of Smith Falls — have been granted a total of \$21,688 under the Municipal 3Rs Program.



## Ministry Writes Cheque In Support Of Soil Cleanup Technology

DECEMBER 22, 1992

A total of four 35-ton contaminated soil samples taken from the City of Toronto-owned Ataritari site will be treated with an innovative soil decontamination process in the Tallon pilot-scale plant at the facilities of Lakefield Research, north of Peterborough.

## Clean Technology

Bruce Holbein, president of Tallon Metal Technologies Inc. of Guelph, accepted a cheque for \$61,358 which will help demonstrate the effectiveness of Tallon's new tech-

nology for soil remediation and its application to land, like the Ataritari site, contaminated by historic industrial use.

The cheque comes as part of the \$914,000 provincial contribution to the development and demonstration of the \$2.44 million clean-up project.

The funds were made available through MOE's Environmental Technologies Program and demonstration project support under the federal/provincial DESERT program (Development and Demonstration of Site Remediation Technology).

## Protection Money

According to a study released by the province in July 1992, Ontario's environmental protection industry is a significant force in the province's economy — employing as many people as the indus-

trial sectors for motor vehicle parts and accessories and vehicle assembly and leading machinery, chemicals, iron and steel and pulp and paper.

The 2,000 companies in Ontario's green industry generated total annual sales of 2.5 billion dollars as of 1990 and consultants estimate that this revenue will keep climbing at a rate of 14 per cent a year for the next five years.

## Sudbury Gets Blue Box Expansion Boost

NOVEMBER 12, 1992

Sudbury Region has received a \$344,182 cheque to assist in expanding the regional Blue Box program to add aluminium foil and containers, corrugated cardboard and fine paper to materials now collected. The Environment Minister commended the people of the region for recycling close to 5,000 tonnes of material in the first year of operation.

With the new assistance, MOE has now invested a total of more than \$2.6 million in the 3Rs program for the Sudbury area. Mrs. Grier stressed the areas potential for home and municipal composting. The ministry has provided \$320,000 to the region for the purchase and distribution of 7,200 home composters.

The ministry has also provided \$25,000 toward the region's study of central composting. As a result of the study, MOE is seriously considering a recent application for funds to establish a pilot composting plant. Extensive and continuing land reclamation in this area could provide a virtually unlimited market for compost.

## Turkey Creek Cleanup Gets \$271,771 MOE Support

DECEMBER 3, 1992

The City of Windsor has been awarded \$271,771 as part of the government's \$104.8 million Direct Grants Program for water and sewage projects. The grant was allocated for the building of sanitary sewers on Towangeau Road, Byng Road and Cadillac Street.

Windsor-Walkerville MPP Wayne Lessard, welcomed the grant, saying that this project would help the community by cleaning up long-term pollution problems in Turkey Creek and will lead to improved water quality in the Detroit River and the Great Lakes.

The sewers will replace failing septic tank systems which are polluting Turkey Creek, which runs from the centre of Windsor to the Detroit River on the City's west side.

The payment comes as the second instalment of a \$3 million grant made in 1992-93 to the City of Windsor, MOE makes these grants available to selected municipalities with more than 5,000 residents, providing 50 per cent of the costs to accelerate existing programs to install sanitary sewers in urban areas served by faulty septic tank systems.

The first instalment of Windsor's grant — \$49,725 — went toward the construction of a trunk sanitary sewer on Morand Street.

Turkey Creek's watershed area contains approximately 4,000

homes, many served by failing septic tanks. The area is known for its heavy clay soils and high water table, which impairs the functioning of septic tanks.

## Waste Reduction Action Plan Receive Funding Province-Wide

NOVEMBER 18, 1992

More than \$7.9 million has been awarded to help 86 municipalities and organizations across Ontario to reduce waste. Funding through the municipal 3Rs programs for 1992 now totals nearly \$27 million.

Ten municipalities and organizations, including the Waterloo County Board of Education, will each receive more than \$250,000 for their recycling initiatives. The Essex Windsor Waste Management Committee was awarded \$1,646,733 towards the Blue Box program, home composting and leaf collection programs.

The Town of Napanee was granted \$22,500 for an innovative project to develop a bioconversion process system to use farm manures and municipal waste.

More than \$450,000 was awarded to three boards of education through the Student Action for Recycling (STAR) program. This includes \$27,020 to the Hamilton-Wentworth Roman Catholic Separate School Board for food digesters and vermicomposting kits.

To help speed waste reduction programs in Northern Ontario, \$254,579 has been committed to the Northwest Ontario Recycle Association in Dryden to support the Blue Box program and a feasibility study.

## EDITOR'S NOTE

On February 3, 1993, the Ministry of Environment and Energy was created, incorporating the former ministries of the Environment and Energy. The articles in this edition of *Environment Ontario* Highlights reflect a period when the ministry was called the Ministry of the Environment. The publications listed in the Periodic Publications Report will continue to be made available by the new ministry. The next edition of *Environment Ontario* Highlights will include previously released items from the former ministries of the Environment and Energy, as well as from the new ministry.

# 1991 ONTARIO REPORT DOCUMENTS 21 YEARS OF AIR QUALITY MEASUREMENT

DECEMBER 29, 1992

The 1991 air quality report released by the Ministry of the Environment names three contaminants — ozone, suspended particles and total reduced sulphur compounds (TRS) — as those which exceeded the provincial air quality most frequently. U.S. pollution sources cause a major part of the ground level ozone concentrations in Ontario. On the brighter side, the report also documents significant long-term improvements in air quality.

## Year-round monitoring

The Ontario air monitoring network operates continuously, year-round. During the year, Ontario's 1-hour air quality criteria were exceeded for at least one hour at 44 of the Ministry of the Environment's 48 ozone monitoring stations and at 24 of the 32 TRS stations. Twenty-four

hour average concentrations of total suspended particulate reached undesirable levels at least once during the year at 76 of the 125 high volume particulate monitoring sites. The 24-hour criterion for suspended particles, measured as co-efficient of haze, was exceeded at 21 of the province's 44 locations monitoring

for that contaminant. These finer particles are more significant in terms of health effects than total suspended particulate.

Exposure time and level of contamination are both factors in the effect of air pollution on public health. Because of this, air monitoring results are expressed in terms of level and duration.

Excessive sulphur dioxide concentrations were recorded at 16 of 70 monitoring locations. Twelve of these sites with high readings were in the Sudbury area. In addition, five sites, all near lead processing plants in the Toronto area recorded levels in excess of the 24-hour lead criterion. The 24-hour average criterion for nickel was exceeded once at Port Colborne. Over the past 20 years, average lead levels have dropped by 99 per cent, carbon monoxide and sulphur dioxide by 75 per cent and total suspended particulates by 49 per cent. Long term levels show little or no improvement for ozone, which is formed by photochemical reactions in the atmosphere downwind of pollution sources such as traffic, power

plants, chemical plants, refineries, incinerators, etc.

## Bad Ozone

While naturally occurring ozone in the stratosphere is beneficial to life by shielding the earth from harmful ultra violet radiation given off by the sun, high concentrations of ozone at ground level are a major health and environmental concern. At ground level, ozone, a component of smog, damages some species of vegetation and can cause eye and lung irritation in humans and animals.

The report also includes a comparison of air quality in northern and southern Ontario and a discussion of specific air quality problem areas. The Ontario routine air monitoring network has a total of 387 instruments: 262 continuous monitors and 125 high volume particulate samplers.

Copies of the report, *Air Quality in Ontario*, 1991, PIBS 2251E-01, are available through the ministry's Public Information Centre, at 135 St. Clair Avenue West, Toronto, Ontario M4V 1P5, (416) 323-4321.

## JOBS ONTARIO PUMPS \$258 MILLION INTO SEWER AND WATER PROJECTS — NEW CLEAN WATER AGENCY ESTABLISHED

FEBRUARY 11, 1993

JobsOntario will invest \$258 million in the upgrading and construction of new sewer and water facilities across Ontario, Premier Bob Rae announced at the Ottawa-Carleton Regional Offices.

Together with municipal and private sector contributions, over \$400 million will be spent over the next few years, creating about 8,000 jobs. Over a ten year period, investment in Ontario infrastructure will reach \$6 billion and create more than 10,000 jobs or \$90 million will be spent in 1993-94 in support of 120 construction projects in 90 municipalities and opening the door to as many as 2,800 new employees.

The private sector is expected to become increasingly involved in the construction program province-wide, as in the \$12.5 million expan-

sion of the Ingleside sewage treatment plant where Kraft General Foods is contributing \$5 million in addition to a provincial contribution of \$6.1 million and funding from Onsabruk Township of \$1.4 million.

Earlier the same week, the premier announced the creation of an Ontario Clean Water Agency, one of three new Crown corporations which will come under the umbrella of the jobsOntario program. The agency will play an important role in securing private sector investment in sewer and water projects throughout Ontario. It will also operate provincially owned sewer and water facilities and help to plan, finance, build, upgrade and operate facilities where municipalities and regions need such assistance.

The new Crown agency is to report to the Minister of Environment and Energy.

## MINISTRY IDENTIFIES DIOXIN IN UNIROYAL DISCHARGE

DECEMBER 29, 1992

MOE has identified unacceptable levels of dioxin in a discharge from Uniroyal's Elmira plant.

Ministry laboratory analysis showed dioxin at toxic equivalent (TEQ) levels of 258 parts per quadrillion (ppq) and 215 ppq at two points in a discharge pipe to Canagagigue Creek. The drinking water objective for dioxin is 15 ppq TEQ.

The company shut down operations for Christmas and the ministry has ordered that processes connected to the affected discharge not

be re-started until proper safeguards can be installed. Uniroyal will also be required to track down the cause of the dioxins and eliminate it.

MOE advised local health officials in Waterloo Region, Brant and Haldimand-Norfolk of its findings. The ministry also informed officials of municipalities with water intakes on the Grand River.

The original samples at Uniroyal were taken by MOE as part of the ministry's Municipal Industrial Strategy for Abatement (MISA). Regional MOE staff alerted the company to ensure the discharge was stopped as soon as the findings were available.

# GUIDELINES FOR LAND USE PLAN REVIEW PROGRAM

OCTOBER 9, 1992

Seven guidelines have been released as part of ministry efforts to provide a more effective and efficient MOE Land Use Plan Review Program.

As interim positions, they are intended to provide clear direction to MOE staff and guidance to municipalities, consultants and developers by: ensuring consistency across the ministry; addressing technical matters; clarifying interpretation of existing policy; and setting out MOE positions on matters not addressed fully in formal ministry policy. Much of the content of the guidelines reflects practices currently in use in the plan review process.

## Public Consultation

As part of the public consultation process conducted during October, November and December 1992, MOE sought the co-operation of the following groups: the Association of Municipalities of Ontario, the Urban Development Institute, the Ontario Professional Planners Institute, the Conservation Council of Ontario, the Consulting Engineers of Ontario, the International Association of Hydrogeologists (Canadian National Chapter) and the Regional Planning Commissioners to provide the ministry with comments from the members.

The ministry also held regional sessions to distribute the guidelines to stakeholders, clarify their content and to involve stakeholders in the process of formalising the guidelines.

The new guidelines are intended to guide MOE review of planning documents, and to assist in providing direction to municipalities and consultants on the requirements of

the MOE in land use planning. Other agencies may have requirements over and above the MOE mandate.

## The Guidelines

1. *Guideline on Planning for Sewage and Water Services*: — This guideline applies to the MOE mandate only.

2. *Guideline for the Responsibility for Communal Water and Sewage Works and Communal Sewage Systems*: — Again, this guideline applies only to the MOE mandate.

3. *Guideline for Calculating and Reporting on Uncommitted Reserve*

*Capacity at Sewage and Water Treatment Plants*: — This guideline applies to all water and sewage plants in Ontario regardless of ownership and pertains to the MOE mandate only.

4. *Guideline on Separation Distance between Industrial Facilities and Sensitive Land Uses*: — This guideline pertains to the MOE mandate only.

5. *Guideline on Planning for the Re-Use of Potentially Contaminated Sites*: — This guideline pertains to the MOE mandate only.

6. *Technical Guideline for Water Supply Assessment for Subdivision Development on Individual Private Wells*: — This guideline pertains to the MOE mandate only.

7. *Technical Guideline for Assessing the Potential for Groundwater Impact at Developments Served by Individual Sub-surface Sewage Systems in Non-designated Areas*: — This guideline pertains to the MOE mandate only.

Copies of the seven guidelines, PIBS 2169, are available through the ministry's Public Information Centre, at 135 St. Clair Avenue West, Toronto, Ontario M4V 1P5, (416) 323-4321.



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